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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/515,982	11/24/2004	Ago Samoson	458/1	6297
24101	7590	11/29/2006	EXAMINER VARGAS, DIXOMARA	
BRUCE E. LILLING LILLING & LILLING P.C. P.O. BOX 560 GOLDEN BRIDGE, NY 10526			ART UNIT 2859	

DATE MAILED: 11/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/515,982

**Applicant(s)**

SAMOSON ET AL.

**Examiner**

Dixomara Vargas

**Art Unit**

2859

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 September 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 November 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Lippmaa et al. (US 4,254,373).

With respect to claim 1, Lippmaa discloses a probehead for measuring nuclear magnetic resonance (Figures 1 and 2) that is comprised of a frame (#2), a radio frequency coil attached thereto (#1) and a rotor located inside the coil (#4) containing the examined sample (#6), supported by bearings (Column 4, lines 13-32) and provided with turbines at both ends (Column 4, lines 13-35, Figure 1, #7), a source of compressed gas (Column 4, lines 13-15), an executive unit and a control unit, characterized in that different turbines make the rotor rotate in the same or in opposite directions and the executive unit is provided at least two separate compressed gas channels for rotor velocity control for each turbine (Column 4, lines 13-32).

3. With respect to claim 2, Lippmaa discloses at both ends of the rotor there are two turbines respectively to provide rotation in opposite directions and the executive unit has been provided with four compressed gas channels for rotor velocity control (Column 4, lines 13-32, Figure 1, #13).

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4. With respect to claim 3, Lippmaa discloses the turbines are cylindrical and the diameter of their work area is less than the diameter of the rotor (Column 3, lines 16-35; Figures 1-3).
5. With respect to claim 4, Lippmaa discloses the coil is connected to the inner surface of the frame with at least two, preferably four sheets of thin non-conductive and non-magnetic material (Column 3, lines 45-62; Figures 1-3).
6. With respect to claim 5, Lippmaa discloses the sheets are made of ceramic material (Column 3, lines 12-17).
7. With respect to claim 6, Lippmaa discloses the coil ends of the sheets comprise grooves for housing Coil sections (Figure 1).

***Claim Rejections - 35 USC § 103***

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lippmaa et al. (US 4,254,373).

With respect to claim 7, Lippmaa discloses the claimed invention except for the ratio of the length and thickness of the sheets is 200:1 to 50:1. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the ratio of the length and thickness of the sheets is 200:1 to 50:1, for the purpose of having a system with dimensions adequate to fit in the probehead and perform its function as desired since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or working ranges involves only routine skill in the art. In re Aller, 10 5 USPQ 233.

#### ***Response to Arguments***

10. Applicant's arguments filed 09/12/06 have been fully considered but they are not persuasive.

11. Applicant argues that Lippmaa fails to disclose or fairly suggest more than one turbine capable of rotate at opposite directions. The examiner disagrees with applicant's argument because Lippmaa discloses a structure of two turbines #7 in each side #5 of the structure as shown in Figure 1 wherein the turbine rotates at the same direction. If applicant means that the rotation of the turbine is restricted to opposite directions and excludes the rotation at the same direction, applicant is reminded that the claimed language suggest either the same direction or opposite direction, and therefore it is understood that according to the claim language that the turbines can be rotated at the same direction as also taught by Lippmaa (Column 4, lines 13-32).

***Conclusion***

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dixomara Vargas whose telephone number is (571) 272-2252. The examiner can normally be reached on Monday to Thursday from 8:00 am. to 4:30 pm..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego Gutierrez can be reached on (571) 272-2245. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Dixomara Vargas  
Art Unit 2859  
November 16, 2006



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